

Soderberg Company, Inc.
Aroostook County
Washburn, Maine
A-891-71-B-N

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**Departmental
Findings of Fact and Order
Air Emissions License**

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Soderberg Company, Inc., of Caribou, Maine has applied for an Air Emission License, permitting the operation of rock crusher units and associated equipment at what is known as the Castonguay Pit on the Everett Road in Washburn, Maine.

B. Emission Equipment

Rock Crushers

<u>Designation</u>	<u>Powered By</u>	<u>Process rate (tons/hr)</u>	<u>Control Device</u>	<u>Date of Manufacture</u>
Crusher #1	diesel	180	water sprays	2004
Crusher #2	diesel	120	water sprays	1990

Diesel Units

<u>Source ID</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % Sulfur Content</u>	<u>Power Output (kW)</u>
Diesel #1	1.6	11.1	Diesel, 0.05%	160
Diesel #2	3.3	23.0	Diesel, 0.05%	340

C. Application Classification

The application for Soderberg Company, Inc. is classified as non-major based on the rock crusher emissions. The license is for a non-major source and has been processed as such.

II BEST PRACTICAL TREATMENT

- A. In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

BPT for new units requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Crusher Units

Soderberg Company, Inc. makes use of two portable crusher units, designated Crushers #1 and #2, at the Castanguay pit. Crusher #1 is a Pioneer manufactured jaw crusher and Crusher #2 is a TelSmith manufactured cone crusher. Crushers #1 and #2 are portable crushers, manufactured in 2004 and 1990 respectively, with a rated capacities of 180 tons per hour (tons/hr) and 120 tons/hr respectively. Crusher #1 is subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

As a requirement of NSPS Subpart OOO, it is necessary that an initial performance test be performed on Crusher #1. This consists of a certified Method 9 observation. The performance test shall be completed within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit. Soderberg Company, Inc. shall submit a test notice to the regional inspector at least 30 days prior to the performance test. Any rescheduled test requires a 7-day notice to the regional inspector.

Crusher #2 has a rated capacity below the NSPS Subpart OOO applicability threshold and is therefore not subject to NSPS Subpart OOO. Crusher #2 was formally licensed by Soderberg for operation at the leased Hubert pit in Unorganized Township T11 R4, Maine under air emission license A-892-71-A-N. Soderberg leased the Hubert pit to fulfill a DOT contract and has since completed the project and ceased operations in the Hubert pit and plans to retire air emission license A-892-71-A-N.

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The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of Best Available Control Technology (BACT) for control of particulate matter (PM) emissions from the rock crushers, Soderberg Company, Inc. shall maintain and operate water sprays on the rock crusher at the Washburn facility in such a manner so as to control visible emissions to no greater than 10% opacity on a 6-minute block average basis.

C. Diesel Units

Soderberg Company, Inc. utilizes two diesel units, designated Diesels #1 and #2, to provide power to the facility's two crusher units. Diesel #1 is a Cummins manufactured diesel with a rated maximum design capacity of 160 kW and is utilized as a power source for Crusher #1. Diesel #2 is a Cat manufactured diesel with a rated maximum design capacity of 475 Hp and is utilized as a power source for Crusher #2.

Like Crusher #2, Diesel #2 was formally licensed by Soderberg for operation at the leased Hubert pit in Unorganized Township T11 R4, Maine under air emission license A-892-71-A-N.

Total annual facility fuel use for operation of the diesel units shall not exceed 14,000 gallons of diesel fuel at a sulfur content of no greater than 0.05% sulfur by weight.

A summary of the BACT analysis is as follows

1. BACT for diesel fuel is a sulfur content of 0.05% by weight.
2. BACT for diesel fuel for PM is an emission limit of 0.12 lb/MMBtu. PM₁₀ emissions limits are based on PM limits.
3. NO_x, CO and VOC emission limits are based on AP-42 data dated 10/96.
4. Visible emissions from each diesel stack shall not exceed 30% opacity on a (6) six-minute block average except, for no more than 2 six-minute block averages in a 3-hour period.

D. Stock Piles and Roadways

Visible emissions from potential sources of fugitive particulate matter emissions, including material stockpiles and unpaved roadways, shall not exceed an opacity of 20%, except for no more than 5-minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any 1-hour.

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E. Facility Emissions and Fuel Use Caps

- Total annual facility fuel use for operation of the diesel units shall not exceed 14,000 gallons of diesel fuel at a sulfur content of 0.05% by weight.

Total Allowable Annual Emission for the Facility
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Tons/Year</u>
PM	0.1
PM ₁₀	0.1
SO ₂	0.05
NO _x	4.3
CO	0.9
VOC	0.3

III. AMBIENT AIR QUALITY ANALYSIS

According to Chapter 115 of the Maine Air Quality Regulations, the level of air quality analyses required for a minor source shall be determined on a case-by-case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- the existing state of technology
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

The Department hereby grants Air Emission License A-891-71-B-N, subject to the following conditions:

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions.

- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.

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- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - b. pursuant to any other requirement of this license to perform stack testing.
 - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

SPECIFIC CONDITIONS

- (16) Rock Crushers
 - A. Soderberg Company, Inc. shall maintain and operate water sprays on the facility's rock crusher units in such a manner as to control visible emissions to no greater than 10% opacity on a 6-minute block average basis.
 - B. Soderberg Company, Inc. shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location.
 - C. Soderberg Company, Inc. shall maintain a log detailing and quantifying the hours of operation on a daily basis for the primary and secondary rock crushers. The operation log shall be kept on-site at the rock crushing location.
- (17) New Source Performance Standards for Crusher #1
 - A. Crusher #1 is subject to 40 CFR Part 60 Subparts A and OOO and Soderberg Company, Inc. shall comply with the notification and record keeping requirements of 40 CFR Part 60.676 and Part 60.7, except for Section (a)(2) of 60.7 per Subpart OOO, §60.676(h).

- B. Soderberg Company, Inc. shall have an initial performance test performed on Crusher #1 per the applicable sections of 40 CFR Part 60, Subpart OOO, §60.675. This consists of a certified Method 9 observation. The performance test shall be completed within 60 days after production start-up of the 2006 crushing season. Soderberg Company, Inc. shall submit a test notice to the regional inspector at least 30 days prior to the performance test. Any rescheduled test requires a 7 day notice to the regional inspector.

(18) Diesels #1 and #2

- A. Total annual facility fuel use for the operation of the rock crusher units shall not exceed 14,000 gals/yr. of diesel fuel oil with a maximum sulfur content of 0.05% by weight, based on a 12 month rolling total. Compliance with the fuel restriction shall be demonstrated by means of a fuel use record, which shall include fuel receipts from the supplier showing the quantity of fuel delivered and supplier certification indicating the percent sulfur of the purchased fuel. Fuel use records shall be maintained on a monthly basis, in addition to the 12-month rolling total. [MEDEP Chapter 115, BACT]

- B. Emissions shall not exceed the following:

Equipment		PM	PM₁₀	SO₂	NO_x	CO	VOC
Diesel #1	lb/hr	0.2	0.2	0.6	6.9	1.5	0.5
Diesel #2	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.2	0.2	0.6	5.0	1.3	0.5

[MEDEP Chapter 115, BACT]

- C. Visible emissions from each diesel stack shall not exceed 20% opacity on a six- (6) minute block average except, for no more than 2 six minute block averages in a 3 hour period. [MEDEP Chapter 101]

(19) Fugitive Emissions

Potential sources of fugitive PM emissions including material stockpiles and unpaved roadways shall be controlled by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 10% opacity on a three (3) minute block average basis. [MEDEP Chapter 101]

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(20) Equipment Relocation

- A. Soderberg Company, Inc. shall notify the Bureau of Air Quality, by a written notification at least ten days in advance, prior to relocation of any equipment carried on this license. The notification shall be sent to:

Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Equipment relocation notification can also be done on-line with e-notice at www.maine.gov/dep/air/compliance/forms/relocation.

The notification shall include the address of the equipment's new location, an identification of the equipment and the license number pertaining to the relocated equipment.

- B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.
- (21) Soderberg Company, Inc. shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605-C).
- (22) Soderberg Company, Inc. shall pay the annual air emission license fee within 30 days of June 31 of each year. Pursuant to Title 38-353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for the revocation of the license under Title 38-341-D, Subsection 3.

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(23) Soderberg Company, Inc. shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF , 2005.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL
PROCEDURES.

The term of this order shall be for five (5) years from the above signature date.

Date of initial receipt of application: **July 5, 2005**

Date of application acceptance: **July 11, 2005**

Date filed with the Board of Environmental Protection: _____.

This Order prepared by, Peter G. Carleton, Bureau of Air Quality